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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/849,691	CRANDALL ET AL.	
	Examiner	Art Unit	
	KELLIE CAMPBELL	3691	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 May 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 May 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *19 May 2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The following is a first, non-final Office Action on the merits in response to the application filed on May 19, 2004. **Claims 1-40 are pending and have been examined.**

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. **Claims 28, 32, 39 and 40 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

4. **As per Claim 20**, it appears to recite a product, however, the components of the product are all method steps. Therefore, this recitation is vague and indefinite because it unclear whether Applicant is claiming a system or a process. For purposes of examination, Examiner will interpret this claim to be directed to a process.

5. **As per Claim 28**, it appears to recite a product, however, the components of the product are all method steps. Therefore, this recitation is vague and indefinite because it unclear whether Applicant is claiming a system or a process. For purposes of examination, Examiner will interpret this claim to be directed to a process.

6. **As per Claim 32**, it appears to recite a system ("insurance rating system"), however, the components of the system are merely software elements ("an interface module", "a risk rating module"). Therefore, this recitation is vague and indefinite

because it unclear whether Applicant is claiming a "system" or "software". For purposes of examination, Examiner will interpret the claim to be directed to software.

7. **As per Claim 39**, it appears to recite a system ("insurance rating system") but the components of the system are merely software elements ("an interface module", "a mapping module", "a risk rating module"). Therefore, this recitation is vague and indefinite because it unclear whether Applicant is claiming a "system" or "software". For purposes of examination, Examiner will interpret the claim to be directed to software.

8. **As per Claim 40**, it recites the claim elements "a means for comparing an identified; and a means for obtaining and using a score" which are means plus function limitations that invokes 35 U.S.C. 112, sixth paragraph. However, the written description fails to clearly link or associate the disclosed structure, material, or acts to the claimed function such that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed function. The specification recites software in the form of "modules" and "any computing device capable of executing one or more programs". These recitations are insufficient disclosure of the corresponding structure for performing the claimed function. Disclosing only a general purpose computer as the structure (i.e. means) or simply reciting "software" with providing some detail about the means to accomplish the function is insufficient. Descriptions of the outcome of the claimed functions are not a description of the structure, i.e., the computer programmed to execute a particular algorithm. Examples of the results of the operation of an unspecified algorithm is also not sufficient. Therefore, Claim 40 will not be interpreted as invoking 35 U.S.C. 112, sixth paragraph for prior art purposes.

Applicant is required to:

(a) Amend the claim so that the claim limitation will no longer be a means (or step) plus function limitation under 35 U.S.C. 112, sixth paragraph; or

(b) Amend the written description of the specification such that it clearly links or associates the corresponding structure, material, or acts to the claimed function without introducing any new matter (35 U.S.C. 132(a)); or

(c) State on the record where the corresponding structure, material, or acts are set forth in the written description of the specification that perform the claimed function. For more information, see 37 CFR 1.75(d) and MPEP §§ 608.01(o) and 2181.

Claim Rejections - 35 USC § 101

9. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

10. **Claims 1-40 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

11. **As per Claim 1**, it is directed to a process comprising method steps of "calculating" and "packaging". In order for a process to be considered statutory under 35 U.S.C. §101, the claimed process must satisfy the "**machine or transformation test**"; that is the process must either: (1) be tied to a particular machine or apparatus or (2) transform a particular article to a different state or thing. In re Bilski, 545 F. 3d 943, 88USPQ2d 1385 (Fed. Cir. 2008). When neither of these requirements is met by the claim, the method is not a patent eligible process under 35 U.S.C. §101 and is non-

statutory subject matter. The method steps of Claim 1 are not tied to a machine or apparatus and do not involve transforming an article into a different state or thing. Applicant's claim is not drawn to patent-eligible subject matter because it fails the **"machine or transformation test"**. Therefore, Claim 1 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

12. **As per Claims 2-4**, they each depend directly on Claim 1 and do not cure the deficiencies set forth above. Therefore, Claims 2-4 are also rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

13. **As per Claim 5**, it is directed to a process comprising method steps of "identifying", "comparing", and "packaging". In order for a process to be considered statutory under 35 U.S.C. §101, the claimed process must satisfy the "**machine or transformation test**"; that is the process must either: (1) be tied to a particular machine or apparatus or (2) transform a particular article to a different state or thing. In re Bilski, 545 F. 3d 943, 88USPQ2d 1385 (Fed. Cir. 2008). When neither of these requirements is met by the claim, the method is not a patent eligible process under 35 U.S.C. §101 and is non-statutory subject matter. The method steps of Claim 5 are not tied to a machine or apparatus and do not involve transforming an article into a different state or thing. Applicant's claim is not drawn to patent-eligible subject matter because it fails the **"machine or transformation test"**. Therefore, Claim 5 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

14. **As per Claims 6-7**, they each depend directly on Claim 5 and do not cure the deficiencies set forth above. Therefore, Claims 6-7 are also rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

15. **As per Claim 8**, it is directed to a process comprising method steps of "identifying", "comparing", and "calculating". In order for a process to be considered statutory under 35 U.S.C. §101, the claimed process must satisfy the **"machine or transformation test"**; that is the process must either: (1) be tied to a particular machine or apparatus or (2) transform a particular article to a different state or thing. In re Bilski, 545 F. 3d 943, 88USPQ2d 1385 (Fed. Cir. 2008). When neither of these requirements is met by the claim, the method is not a patent eligible process under 35 U.S.C. §101 and is non-statutory subject matter. The method steps of Claim 1 are not tied to a machine or apparatus and do not involve transforming an article into a different state or thing. Applicant's claim is not drawn to patent-eligible subject matter because it fails the **"machine or transformation test"**. Therefore, Claim 8 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

16. **As per Claims 9-15**, they each depend either directly or indirectly on Claim 8 and do not cure the deficiencies set forth above. Therefore, Claims 9-15 are also rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

17. **As per Claim 16**, it is directed to a process comprising the method steps of "identifying" and "calculating". In order for a process to be considered statutory under 35 U.S.C. §101, the claimed process must satisfy the **"machine or transformation**

test"; that is the process must either: (1) be tied to a particular machine or apparatus or (2) transform a particular article to a different state or thing. In re Bilski, 545 F. 3d 943, 88USPQ2d 1385 (Fed. Cir. 2008). When neither of these requirements is met by the claim, the method is not a patent eligible process under 35 U.S.C. §101 and is non-statutory subject matter. The method steps of Claim 1 are not tied to a machine or apparatus and do not involve transforming an article into a different state or thing. Applicant's claim is not drawn to patent-eligible subject matter because it fails the **"machine or transformation test"**. Therefore, Claim 16 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

18. **As per Claims 17-19**, they each depend directly on Claim 16 and do not cure the deficiencies set forth above. Therefore, Claims 17-19 are also rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

19. **As per Claim 20**, it appears to recite a product, however, the components of the product are all method steps. For purposes of examination, Examiner has interpreted this claim to be directed to a process (see 35 U.S.C. 112, second paragraph rejection above). In order for a process to be considered statutory under 35 U.S.C. §101, the claimed process must satisfy the **"machine or transformation test"**; that is the process must either: (1) be tied to a particular machine or apparatus or (2) transform a particular article to a different state or thing. In re Bilski, 545 F. 3d 943, 88USPQ2d 1385 (Fed. Cir. 2008). When neither of these requirements is met by the claim, the method is not a patent eligible process under 35 U.S.C. §101 and is non-statutory subject matter. The method steps of Claim 20 are only nominally tied to a machine (i.e. the claim merely

discloses a computer readable medium containing a program) and Applicant does not recite that the program is capable of causing functional change in a computer. Thus, Claim 20 is drawn to a computer program *per se* because it is merely functional descriptive material. Computer programs *per se* are not patent-eligible subject matter because they are neither computer components nor statutory processes, as they are not "acts" being performed. Therefore, Claim 20 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Examiner respectfully suggests that Applicant recite the computer program as being recorded on an appropriate computer readable medium so as to be structurally and functionally interrelated to the medium and permit the function of the descriptive material to be realized (e.g. "a computer program product comprising computer executable code embedded on a computer readable medium which when executed causes a computer to perform the steps of").

20. **As per Claims 21-27**, they each depend either directly or indirectly on Claim 20 and do not cure the deficiencies set forth above. Therefore, Claims 21-27 are also rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

21. **As per Claim 28**, it appears to recite a product, however, the components of the product are all method steps. For purposes of examination, Examiner has interpreted this claim to be directed to a process (see 35 U.S.C. 112, second paragraph rejection above). In order for a process to be considered statutory under 35 U.S.C. §101, the claimed process must satisfy the "**machine or transformation test**"; that is the process

must either: (1) be tied to a particular machine or apparatus or (2) transform a particular article to a different state or thing. In re Bilski, 545 F. 3d 943, 88USPQ2d 1385 (Fed. Cir. 2008). When neither of these requirements is met by the claim, the method is not a patent eligible process under 35 U.S.C. §101 and is non-statutory subject matter. The method steps of Claim 28 are only nominally tied to a machine (i.e. the claim merely discloses a computer readable medium containing a program) and Applicant does not recite that the program is capable of causing functional change in a computer. Thus, Claim 28 is drawn to a computer program *per se* because it is merely functional descriptive material. Computer programs *per se* are not patent-eligible subject matter because they are neither computer components nor statutory processes, as they are not "acts" being performed. Therefore, Claim 28 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Examiner respectfully suggests that Applicant recite the computer program as being recorded on an appropriate computer readable medium so as to be structurally and functionally interrelated to the medium and permit the function of the descriptive material to be realized (e.g. "a computer program product comprising computer executable code embedded on a computer readable medium which when executed causes a computer to perform the steps of").

22. **As per Claims 29-31**, they each depend either directly or indirectly on Claim 28 and do not cure the deficiencies set forth above. Therefore, Claims 29-31 are also rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

23. **As per Claim 32**, it appears to recite a system ("insurance rating system"), however, the components of the system are merely software elements ("a mapping module", "a risk rating module"). No computer-readable medium or other hardware is positively recited to establish a statutory category or enable any functionality of the recited descriptive material to be realized. Therefore, Claim 32 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

24. **As per Claims 33-38**, they each depend directly on Claim 32 and do not cure the deficiencies set forth above. Therefore, Claims 33-38 are also rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

25. **As per Claim 39**, it appears to recite a system ("insurance rating system"), however, the components of the system are merely software elements ("an interface module", "a mapping module", "a risk rating module"). No computer-readable medium or other hardware is positively recited to establish a statutory category or enable any functionality of the recited descriptive material to be realized. Therefore, Claim 39 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

26. **As per Claim 40**, it is directed to a system, however, the components of the system are merely software elements (see the 35 U.S.C. 112, second paragraph rejection above). No computer-readable medium or other hardware is positively recited to establish a statutory category or enable any functionality of the recited descriptive material to be realized. Therefore, Claim 39 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Therefore, Claim 40 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

27. **Claims 8-31 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,186,793 B1 to Brubaker (hereinafter Brubaker).**

28. **As per Claim 8,** Brubaker discloses an insurance rating method, comprising:

identifying a location (Column 1, Lines 48-55, These objects and others are achieved according to the present invention by an insurance rating process comprising the steps of selecting a plurality of predetermined geographic locations or points, determining the expected losses at the predetermined points, calculating an insurance rate for each of the predetermined points, and then interpolating among the insurance rate values established for the predetermined points to determine a rate at the desired location.);

identifying a geographic risk zone (Column 1, Lines 48-55, These objects and others are achieved according to the present invention by an insurance rating process comprising the steps of selecting a plurality of predetermined geographic locations or points, determining the expected losses at the predetermined points, calculating an

insurance rate for each of the predetermined points, and then interpolating among the insurance rate values established for the predetermined points to determine a rate at the desired location.);

comparing the location to the geographic risk zone to determine **if** the location is at least partially within the risk zone (Column 2, Lines 25-28, after the rates at grid points have been calculated, the rate for any desired location between the grid points may be calculated by interpolation among the values at surrounding grid points; Column 2, Lines 43-48, Selection of data for calculation of expected losses for each grid point should be based on criteria that indicate expected losses per unit of exposure, such as geographic proximity.); and

calculating an insurance rating according to the comparison (Column 1, Lines 39-42, It is, therefore, an object of the invention to provide a more accurate method of evaluating expected losses at given geographic locations for the purpose of establishing insurance rates for those locations.; Column 2, Lines 20-25, The first task in the method of the present invention is to select a grid of predetermined points, within a geographic area, at which expected loss information and insurance rates will be calculated; Column 2, Lines 43-48, Selection of data for calculation of expected lossed for each grid point should be based on criteria that indicate expected losses per unit of exposure, such as geographic proximity.; Column 5, Lines 42-45, $R_{(x,y)}$ represents the rate to be calculated for the point (x,y), and it is assumed that rates for the four grid points have been determined based on loss and exposure data according to the process described herein.).

29. **As per Claim 9**, Brubaker discloses the method of Claim 8, wherein:

identifying a location comprises identifying a location boundary (Column 1, Lines 48-55, These objects and others are achieved according to the present invention by an insurance rating process comprising the steps of selecting a plurality of predetermined geographic locations or points, determining the expected losses at the predetermined points, calculating an insurance rate for each of the predetermined points, and then interpolating among the insurance rate values established for the predetermined points to determine a rate at the desired location.); and

identifying a geographic risk zone comprises identifying a geographic risk zone boundary (Column 1, Lines 48-55, These objects and others are achieved according to the present invention by an insurance rating process comprising the steps of selecting a plurality of predetermined geographic locations or points, determining the expected losses at the predetermined points, calculating an insurance rate for each of the predetermined points, and then interpolating among the insurance rate values established for the predetermined points to determine a rate at the desired location.).

30. **As per Claim 10**, Brubaker discloses the method of Claim 9, wherein:

identifying the location boundary comprises identifying a plurality of location boundary coordinates that at least partially define the location boundary (Column 1, Lines 48-55, These objects and others are achieved according to the present invention by an insurance rating process comprising the steps of selecting a plurality of predetermined geographic locations or points, determining the expected losses at the predetermined points, calculating an insurance rate for each of the predetermined

points, and then interpolating among the insurance rate values established for the predetermined points to determine a rate at the desired location.); and

identifying a geographic risk zone boundary comprises identifying a plurality of risk zone boundary coordinates that at least partially define the geographic risk zone boundary (Column 1, Lines 48-55, These objects and others are achieved according to the present invention by an insurance rating process comprising the steps of selecting a plurality of predetermined geographic locations or points, determining the expected losses at the predetermined points, calculating an insurance rate for each of the predetermined points, and then interpolating among the insurance rate values established for the predetermined points to determine a rate at the desired location.).

31. **As per Claim 11**, Brubaker discloses the method of Claim 9, wherein comparing comprises comparing the location boundary to the geographic risk zone boundary to determine **if** at least a portion of a geographic area bounded by the location boundary is also bounded by the geographic risk zone boundary (Column 2, Lines 41-59, geo-coded" loss and exposure data, that is, data that identifies the latitude and longitude associated with prior insured exposures and losses, are utilized. Selection of data for calculation of expected losses for each grid point should be based on criteria that indicate expected similarity to the grid point in terms of expected losses per unit of exposure, such as geographic proximity. For example, the rate for grid point 10 may be calculated using all loss and exposure data within a one and one-half mile radius for grid point 10. In a preferred embodiment, more sophisticated criteria may be used. For example, the radius could be different for different grid points, or a geographic shape

other than a circle may be used to define the data sets used for each grid point. Alternately, there may be data from regions relatively far away from a particular grid point that may be considered useful for expected loss calculations for a particular grid point, and there may be data from locations relatively near the grid point that may be considered not useful.).

32. **As per Claim 12**, Brubaker discloses the method of Claim 9, wherein comparing comprises comparing the location boundary to the geographic risk zone boundary to determine **if** the location boundary intersects or is contained within the geographic risk zone boundary (Column 2, Lines 41-59, geo-coded" loss and exposure data, that is, data that identifies the latitude and longitude associated with prior insured exposures and losses, are utilized. Selection of data for calculation of expected losses for each grid point should be based on criteria that indicate expected similarity to the grid point in terms of expected losses per unit of exposure, such as geographic proximity. For example, the rate for grid point 10 may be calculated using all loss and exposure data within a one and one-half mile radius for grid point 10. In a preferred embodiment, more sophisticated criteria may be used. For example, the radius could be different for different grid points, or a geographic shape other than a circle may be used to define the data sets used for each grid point. Alternately, there may be data from regions relatively far away from a particular grid point that may be considered useful for expected loss calculations for a particular grid point, and there may be data from locations relatively near the grid point that may be considered not useful.).

33. **As per Claim 13**, Brubaker discloses the method of Claim 8, wherein:

identifying a location comprises identifying a geographic point (Column 1, Lines 48-55, These objects and others are achieved according to the present invention by an insurance rating process comprising the steps of selecting a plurality of predetermined geographic locations or points, determining the expected losses at the predetermined points, calculating an insurance rate for each of the predetermined points, and then interpolating among the insurance rate values established for the predetermined points to determine a rate at the desired location.);

identifying a geographic risk zone comprises identifying a geographic risk zone boundary (Column 1, Lines 48-55, These objects and others are achieved according to the present invention by an insurance rating process comprising the steps of selecting a plurality of predetermined geographic locations or points, determining the expected losses at the predetermined points, calculating an insurance rate for each of the predetermined points, and then interpolating among the insurance rate values established for the predetermined points to determine a rate at the desired location.); and

comparing comprises comparing the geographic point with the geographic risk zone boundary to determine **if** the geographic point is contained within the geographic risk zone boundary (Column 2, Lines 41-59, geo-coded" loss and exposure data, that is, data that identifies the latitude and longitude associated with prior insured exposures and losses, are utilized. Selection of data for calculation of expected losses for each grid point should be based on criteria that indicate expected similarity to the grid point in terms of expected losses per unit of exposure, such as geographic proximity. For

example, the rate for grid point 10 may be calculated using all loss and exposure data within a one and one-half mile radius for grid point 10. In a preferred embodiment, more sophisticated criteria may be used. For example, the radius could be different for different grid points, or a geographic shape other than a circle may be used to define the data sets used for each grid point. Alternately, there may be data from regions relatively far away from a particular grid point that may be considered useful for expected loss calculations for a particular grid point, and there may be data from locations relatively near the grid point that may be considered not useful.).

34. **As per Claim 14**, Brubaker discloses the method of Claim 8, further comprising, **if** the location is determined to be at least partially within the risk zone obtaining a score corresponding to that risk zone and wherein calculating comprises calculating an insurance rating using the score (Column 2, Lines 41-50, "geo-coded" loss and exposure data, that is, data that identifies the latitude and longitude associated with prior insured exposures and losses, are utilized. Selection of data for calculation of expected losses for each grid point should be based on criteria that indicate expected similarity to the grid point in terms of expected losses per unit of exposure, such as geographic proximity. For example, the rate for grid point 10 may be calculated using all loss and exposure data within a one and one-half mile radius for grid point 10.; Column 2, Lines 60-64, Data for calculation of expected losses for a particular grid point may also be selected from other locations based on criteria other than geographic proximity. For example, it may be decided that population density is a useful criteria for similarity of expected loss per unit of exposure.; Column 3, Lines 30-40, Any known

method of weighting data may be used for this method. One such method is to assign a weight which is a fraction having distance from the grid point in the denominator. Such a weight would decrease as distance from the point being rated increases. A general formula for such a weight is $w(1/D+1)^p$; Column 3, Lines 65-67 to Column 4, Lines 1-5, After weights W are determined for all individual data records, each W is divided by the sum of all W's to provide a relative weight. Thus, the relative weights W will sum to 1, and each relative weight W represents a percentage of the total of the weights W. This example assumes that there is exactly one exposure unit associated with each data point (e.g., one vehicle per policy).

35. **As per Claim 15**, Brubaker discloses the method of Claim 8, wherein:

identifying a geographic risk zone comprises identifying a plurality of geographic risk zones (Column 1, Lines 48-55, These objects and others are achieved according to the present invention by an insurance rating process comprising the steps of selecting a plurality of predetermined geographic locations or points, determining the expected losses at the predetermined points, calculating an insurance rate for each of the predetermined points, and then interpolating among the insurance rate values established for the predetermined points to determine a rate at the desired location; Column 8, Lines 43-46, For this example, each grid point is assumed to be a location of historic loss and exposure data as well as a point for which an expected loss will be determined.);

comparing comprises, for each geographic risk zone,

comparing the location to that geographic risk zone to determine if the location is at least partially within the risk zone (Column 8, Lines 43-46, For this example, each grid point is assumed to be a location of historic loss and exposure data as well as a point for which an expected loss will be determined.; Column 9, Lines 58-60, For the zip codes that are only partially within this circle, this estimate includes a proportion of the total claims in each zip code equal to the proportion of data points of the zip code within the circle.) and

calculating comprises calculating an insurance rating according to the comparisons (Column 1, Lines 39-42, It is, therefore, an object of the invention to provide a more accurate method of evaluating expected losses at given geographic locations for the purpose of establishing insurance rates for those locations.; Column 2, Lines 20-25, The first task in the method of the present invention is to select a grid of predetermined points, within a geographic area, at which expected loss information and insurance rates will be calculated; Column 2, Lines 43-48, Selection of data for calculation of expected lossed for each grid point should be based on criteria that indicate expected losses per unit of exposure, such as geographic proximity.; Column 5, Lines 42-45, $R_{(x,y)}$ represents the rate to be calculated for the point (x,y), and it is assumed that rates for the four grid points have been determined based on loss and exposure data according to the process described herein.).

36. **As per Claim 16**, Brubaker discloses an insurance rating method, comprising:

identifying a location (Column 1, Lines 48-55, These objects and others are achieved according to the present invention by an insurance rating process comprising

the steps of selecting a plurality of predetermined geographic locations or points, determining the expected losses at the predetermined points, calculating an insurance rate for each of the predetermined points, and then interpolating among the insurance rate values established for the predetermined points to determine a rate at the desired location.);

identifying a plurality of risk zone boundary coordinates that define a plurality of geographic risk zone boundaries (Column 1, Lines 48-55, These objects and others are achieved according to the present invention by an insurance rating process comprising the steps of selecting a plurality of predetermined geographic locations or points, determining the expected losses at the predetermined points, calculating an insurance rate for each of the predetermined points, and then interpolating among the insurance rate values established for the predetermined points to determine a rate at the desired location.);

37. for each geographic risk zone boundary, comparing the location to the geographic risk zone boundary to determine **if** the location is at least partially within the risk zone boundary (Column 2, Lines 25-28, after the rates at grid points have been calculated, the rate for any desired location between the grid points may be calculated by interpolation among the values at surrounding grid points.; (Column 2, Lines 41-59, geo-coded" loss and exposure data, that is, data that identifies the latitude and longitude associated with prior insured exposures and losses, are utilized. Selection of data for calculation of expected losses for each grid point should be based on criteria that indicate expected similarity to the grid point in terms of expected losses per unit of

exposure, such as geographic proximity. For example, the rate for grid point 10 may be calculated using all loss and exposure data within a one and one-half mile radius for grid point 10. In a preferred embodiment, more sophisticated criteria may be used. For example, the radius could be different for different grid points, or a geographic shape other than a circle may be used to define the data sets used for each grid point. Alternately, there may be data from regions relatively far away from a particular grid point that may be considered useful for expected loss calculations for a particular grid point, and there may be data from locations relatively near the grid point that may be considered not useful.), and

calculating an insurance rating according to the comparison (Column 1, Lines 39-42, It is, therefore, an object of the invention to provide a more accurate method of evaluating expected losses at given geographic locations for the purpose of establishing insurance rates for those locations.; Column 2, Lines 20-25, The first task in the method of the present invention is to select a grid of predetermined points, within a geographic area, at which expected loss information and insurance rates will be calculated; Column 2, Lines 43-48, Selection of data for calculation of expected lossed for each grid point should be based on criteria that indicate expected losses per unit of exposure, such as geographic proximity.; Column 5, Lines 42-45, $R_{(x,y)}$ represents the rate to be calculated for the point (x,y), and it is assumed that rates for the four grid points have been determined based on loss and exposure data according to the process described herein.).

38. **As per Claim 17**, Brubaker discloses the method of Claim 16, wherein identifying a location comprises identifying a plurality of location boundary coordinates that define a location boundary and wherein comparing comprises, for each risk zone boundary, comparing the location boundary to that geographic risk zone boundary to determine **if** the location boundary intersects or is contained within the risk zone boundary (Column 2, Lines 41-59, geo-coded" loss and exposure data, that is, data that identifies the latitude and longitude associated with prior insured exposures and losses, are utilized. Selection of data for calculation of expected losses for each grid point should be based on criteria that indicate expected similarity to the grid point in terms of expected losses per unit of exposure, such as geographic proximity. For example, the rate for grid point 10 may be calculated using all loss and exposure data within a one and one-half mile radius for grid point 10. In a preferred embodiment, more sophisticated criteria may be used. For example, the radius could be different for different grid points, or a geographic shape other than a circle may be used to define the data sets used for each grid point. Alternately, there may be data from regions relatively far away from a particular grid point that may be considered useful for expected loss calculations for a particular grid point, and there may be data from locations relatively near the grid point that may be considered not useful.)..

39. **As per Claim 18**, Brubaker discloses the method of Claim 16, wherein identifying a location comprises identifying a plurality of location boundary coordinates that define a location boundary (Column 1, Lines 48-55, These objects and others are achieved according to the present invention by an insurance rating process comprising the steps

of selecting a plurality of predetermined geographic locations or points, determining the expected losses at the predetermined points, calculating an insurance rate for each of the predetermined points, and then interpolating among the insurance rate values established for the predetermined points to determine a rate at the desired location.) and

wherein comparing comprises, for each risk zone boundary, comparing the location boundary to that geographic risk zone boundary to determine if at least a portion of a geographic area bounded by the location boundary is also bounded by the geographic risk zone boundary (Column 2, Lines 25-28, after the rates at grid points have been calculated, the rate for any desired location between the grid points may be calculated by interpolation among the values at surrounding grid points.).

40. **As per Claim 19**, Brubaker discloses the method of Claim 16, wherein:

identifying a location comprises identifying a geographic point (Column 1, Lines 48-55, These objects and others are achieved according to the present invention by an insurance rating process comprising the steps of selecting a plurality of predetermined geographic locations or points, determining the expected losses at the predetermined points, calculating an insurance rate for each of the predetermined points, and then interpolating among the insurance rate values established for the predetermined points to determine a rate at the desired location.); and

comparing comprises, for each risk zone boundary, comparing the geographic point with that geographic risk zone boundary to determine **if** the geographic point is contained within the geographic risk zone boundary (Column 2, Lines 25-28, after the

rates at grid points have been calculated, the rate for any desired location between the grid points may be calculated by interpolation among the values at surrounding grid points.).

41. **As per Claim 20**, Brubaker discloses a computer readable medium having instructions for:

identifying a location (Column 1, Lines 48-55, These objects and others are achieved according to the present invention by an insurance rating process comprising the steps of selecting a plurality of predetermined geographic locations or points, determining the expected losses at the predetermined points, calculating an insurance rate for each of the predetermined points, and then interpolating among the insurance rate values established for the predetermined points to determine a rate at the desired location.);

identifying a geographic risk zone (Column 1, Lines 48-55, These objects and others are achieved according to the present invention by an insurance rating process comprising the steps of selecting a plurality of predetermined geographic locations or points, determining the expected losses at the predetermined points, calculating an insurance rate for each of the predetermined points, and then interpolating among the insurance rate values established for the predetermined points to determine a rate at the desired location.);

comparing the location to the geographic risk zone to determine **if** the location is at least partially within the risk zone (Column 2, Lines 25-28, after the rates at grid points have been calculated, the rate for any desired location between the grid points

may be calculated by interpolation among the values at surrounding grid points; Column 2, Lines 43-48, Selection of data for calculation of expected losses for each grid point should be based on criteria that indicate expected losses per unit of exposure, such as geographic proximity.); and

calculating an insurance rating according to the comparison (Column 1, Lines 39-42, It is, therefore, an object of the invention to provide a more accurate method of evaluating expected losses at given geographic locations for the purpose of establishing insurance rates for those locations.; Column 2, Lines 20-25, The first task in the method of the present invention is to select a grid of predetermined points, within a geographic area, at which expected loss information and insurance rates will be calculated; Column 2, Lines 43-48, Selection of data for calculation of expected lossed for each grid point should be based on criteria that indicate expected losses per unit of exposure, such as geographic proximity.; Column 5, Lines 42-45, $R_{(x,y)}$ represents the rate to be calculated for the point (x,y), and it is assumed that rates for the four grid points have been determined based on loss and exposure data according to the process described herein.).

42. **As per Claim 21**, Brubaker discloses the medium of Claim 20, wherein the instructions for:

identifying a location include instructions for identifying a location boundary (Column 1, Lines 48-55, These objects and others are achieved according to the present invention by an insurance rating process comprising the steps of selecting a plurality of predetermined geographic locations or points, determining the expected

losses at the predetermined points, calculating an insurance rate for each of the predetermined points, and then interpolating among the insurance rate values established for the predetermined points to determine a rate at the desired location.);; and

identifying a geographic risk zone include instructions for identifying a geographic risk zone boundary (Column 1, Lines 48-55, These objects and others are achieved according to the present invention by an insurance rating process comprising the steps of selecting a plurality of predetermined geographic locations or points, determining the expected losses at the predetermined points, calculating an insurance rate for each of the predetermined points, and then interpolating among the insurance rate values established for the predetermined points to determine a rate at the desired location.);.

43. **As per Claim 22**, Brubaker discloses the medium of Claim 21, wherein the instructions for:

identifying the location boundary include instructions for identifying a plurality of location boundary coordinates that at least partially define the location boundary (Column 1, Lines 48-55, These objects and others are achieved according to the present invention by an insurance rating process comprising the steps of selecting a plurality of predetermined geographic locations or points, determining the expected losses at the predetermined points, calculating an insurance rate for each of the predetermined points, and then interpolating among the insurance rate values established for the predetermined points to determine a rate at the desired location.);; and

identifying a geographic risk zone boundary include instructions for identifying a plurality of risk zone boundary coordinates that at least partially define the geographic risk zone boundary (Column 1, Lines 48-55, These objects and others are achieved according to the present invention by an insurance rating process comprising the steps of selecting a plurality of predetermined geographic locations or points, determining the expected losses at the predetermined points, calculating an insurance rate for each of the predetermined points, and then interpolating among the insurance rate values established for the predetermined points to determine a rate at the desired location.);.

44. **As per Claim 23**, Brubaker discloses the medium of Claim 21, wherein the instructions for comparing include instructions for comparing the location boundary to the geographic risk zone boundary to determine if at least a portion of a geographic area bounded by the location boundary is also bounded by the geographic risk zone boundary (Column 2, Lines 25-28, after the rates at grid points have been calculated, the rate for any desired location between the grid points may be calculated by interpolation among the values at surrounding grid points.).

45. **As per Claim 24**, Brubaker discloses the medium of Claim 21, wherein the instructions for comparing include instructions for comparing the location boundary to the geographic risk zone boundary to determine if the location boundary intersects or is contained within the geographic risk zone boundary (Column 2, Lines 25-28, after the rates at grid points have been calculated, the rate for any desired location between the grid points may be calculated by interpolation among the values at surrounding grid points.).

46. **As per Claim 25**, Brubaker discloses the medium of Claim 20, wherein the instructions for:

identifying a location include instructions for identifying a geographic point (Column 1, Lines 48-55, These objects and others are achieved according to the present invention by an insurance rating process comprising the steps of selecting a plurality of predetermined geographic locations or points, determining the expected losses at the predetermined points, calculating an insurance rate for each of the predetermined points, and then interpolating among the insurance rate values established for the predetermined points to determine a rate at the desired location.);;

identifying a geographic risk zone include instructions for identifying a geographic risk zone boundary (Column 1, Lines 48-55, These objects and others are achieved according to the present invention by an insurance rating process comprising the steps of selecting a plurality of predetermined geographic locations or points, determining the expected losses at the predetermined points, calculating an insurance rate for each of the predetermined points, and then interpolating among the insurance rate values established for the predetermined points to determine a rate at the desired location.);; and

comparing include instructions for comparing the geographic point with the geographic risk zone boundary to determine if the geographic point is contained within the geographic risk zone boundary (Column 2, Lines 25-28, after the rates at grid points have been calculated, the rate for any desired location between the grid points may be calculated by interpolation among the values at surrounding grid points.).

47. **As per Claim 26**, Brubaker discloses the medium of Claim 20, further comprising, if the location is determined to be at least partially within the risk zone, obtaining a score corresponding to that risk zone and wherein the instructions for calculating include instructions for calculating an insurance rating using the score (Column 2, Lines 41-50 "geo-coded" loss and exposure data, that is, data that identifies the latitude and longitude associated with prior insured exposures and losses, are utilized. Selection of data for calculation of expected losses for each grid point should be based on criteria that indicate expected similarity to the grid point in terms of expected losses per unit of exposure, such as geographic proximity. For example, the rate for grid point 10 may be calculated using all loss and exposure data within a one and one-half mile radius for grid point 10. In a preferred embodiment, more sophisticated criteria may be used. For example, the radius could be different for different grid points, or a geographic shape other than a circle may be used to define the data sets used for each grid point. Alternately, there may be data from regions relatively far away from a particular grid point that may be considered useful for expected loss calculations for a particular grid point, and there may be data from locations relatively near the grid point that may be considered not useful. ; Column 3, Lines 30-40, Any known method of weighting data may be used for this method. One such method is to assign a weight which is a fraction having distance from the grid point in the denominator. Such a weight would decrease as distance from the point being rated increases. A general formula for such a weight is; Column 3, Lines 65-67 to Column 4, Lines 1-5, After weights W are determined for all individual data records,

each W is divided by the sum of all W's to provide a relative weight. Thus, the relative weights W will sum to 1, and each relative weight W represents a percentage of the total of the weights W. This example assumes that there is exactly one exposure unit associated with each data point (e.g., one vehicle per policy).

48. **As per Claim 27,** Brubaker discloses the medium of Claim 20, wherein the instructions for:

identifying a geographic risk zone include instructions for identifying a plurality of geographic risk zones (Column 1, Lines 48-55, These objects and others are achieved according to the present invention by an insurance rating process comprising the steps of selecting a plurality of predetermined geographic locations or points, determining the expected losses at the predetermined points, calculating an insurance rate for each of the predetermined points, and then interpolating among the insurance rate values established for the predetermined points to determine a rate at the desired location.);;

comparing include instructions for, for each geographic risk zone, comparing the location to that geographic risk zone to determine if the location is at least partially within the risk zone (Column 2, Lines 25-28, after the rates at grid points have been calculated, the rate for any desired location between the grid points may be calculated by interpolation among the values at surrounding grid points.); and

calculating an insurance rating according to the comparison (Column 5, Lines 42-45, $R_{(x,y)}$ represents the rate to be calculated for the point (x,y), and it is assumed that rates for the four grid points have been determined based on loss and exposure data according to the process described herein.).

49. **As per Claim 28**, Brubaker discloses discloses a computer readable medium having instructions for:

identifying a location (Column 1, Lines 48-55, These objects and others are achieved according to the present invention by an insurance rating process comprising the steps of selecting a plurality of predetermined geographic locations or points, determining the expected losses at the predetermined points, calculating an insurance rate for each of the predetermined points, and then interpolating among the insurance rate values established for the predetermined points to determine a rate at the desired location.);;

identifying a plurality of risk zone boundary coordinates that define a plurality of geographic risk zone boundaries (Column 1, Lines 48-55, These objects and others are achieved according to the present invention by an insurance rating process comprising the steps of selecting a plurality of predetermined geographic locations or points, determining the expected losses at the predetermined points, calculating an insurance rate for each of the predetermined points, and then interpolating among the insurance rate values established for the predetermined points to determine a rate at the desired location.);

for each geographic risk zone boundary, comparing the location to the geographic risk zone boundary to determine if the location is at least partially within the risk zone boundary (Column 2, Lines 25-28, after the rates at grid points have been calculated, the rate for any desired location between the grid points may be calculated by interpolation among the values at surrounding grid points.); and

calculating an insurance rating according to the comparison (Column 5, Lines 42-45, R.sub.(x,y) represents the rate to be calculated for the point (x,y), and it is assumed that rates for the four grid points have been determined based on loss and exposure data according to the process described herein.).

50. **As per Claim 29**, Brubaker discloses the medium of Claim 28, wherein the instructions for identifying a location include instructions for identifying a plurality of location boundary coordinates that define a location boundary (Column 1, Lines 48-55, These objects and others are achieved according to the present invention by an insurance rating process comprising the steps of selecting a plurality of predetermined geographic locations or points, determining the expected losses at the predetermined points, calculating an insurance rate for each of the predetermined points, and then interpolating among the insurance rate values established for the predetermined points to determine a rate at the desired location.); and

wherein the instructions for comparing include instructions for, for each risk zone boundary, comparing the location boundary to that geographic risk zone boundary to determine if the location boundary intersects or is contained within the risk zone boundary (Column 2, Lines 25-28, after the rates at grid points have been calculated, the rate for any desired location between the grid points may be calculated by interpolation among the values at surrounding grid points.; Column 2, Lines 41-50).

51. **As per Claim 30**, Brubaker discloses the medium of Claim 28, wherein the instructions for identifying a location include instructions for identifying a plurality of location boundary coordinates that define a location boundary (Column 1, Lines 48-55,

These objects and others are achieved according to the present invention by an insurance rating process comprising the steps of selecting a plurality of predetermined geographic locations or points, determining the expected losses at the predetermined points, calculating an insurance rate for each of the predetermined points, and then interpolating among the insurance rate values established for the predetermined points to determine a rate at the desired location.); and

wherein the instructions for comparing include instructions for, for each risk zone boundary, comparing the location boundary to that geographic risk zone boundary to determine if at least a portion of a geographic area bounded by the location boundary is also bounded by the geographic risk zone boundary (Column 2, Lines 25-28, after the rates at grid points have been calculated, the rate for any desired location between the grid points may be calculated by interpolation among the values at surrounding grid points.).

52. **As per Claim 31**, Brubaker discloses the medium of Claim 28, wherein the instructions for:

identifying a location include instructions for identifying a geographic point (Column 1, Lines 48-55, These objects and others are achieved according to the present invention by an insurance rating process comprising the steps of selecting a plurality of predetermined geographic locations or points, determining the expected losses at the predetermined points, calculating an insurance rate for each of the predetermined points, and then interpolating among the insurance rate values

established for the predetermined points to determine a rate at the desired location.); and

comparing include instructions for, for each risk zone boundary, comparing the geographic point with that geographic risk zone boundary to determine if the geographic point is contained within the geographic risk zone boundary (Column 2, Lines 25-28, after the rates at grid points have been calculated, the rate for any desired location between the grid points may be calculated by interpolation among the values at surrounding grid points.; Column 2, Lines 41-50).

53. **As per Claim 40**, Burbaker discloses an insurance rating system, comprising:

a means for comparing an identified location to a geographic risk zone to determine if the identified location falls within the geographic risk zone (Column 1, Lines 39-42, It is, therefore, an object of the invention to provide a more accurate method of evaluating expected losses at given geographic locations for the purpose of establishing insurance rates for those locations.; Column 2, Lines 20-25, The first task in the method of the present invention is to select a grid of predetermined points, within a geographic area, at which expected loss information and insurance rates will be calculated.); and

a means for obtaining and using a score associated with the risk zone to calculate an insurance rating related to the identified location **if** the location is determined to fall within the geographic risk zone (Column 2, Lines 41-50 "geo-coded" loss and exposure data, that is, data that identifies the latitude and longitude associated with prior insured exposures and losses, are utilized. Selection of data for calculation of

expected losses for each grid point should be based on criteria that indicate expected similarity to the grid point in terms of expected losses per unit of exposure, such as geographic proximity. For example, the rate for grid point 10 may be calculated using all loss and exposure data within a one and one-half mile radius for grid point 10. In a preferred embodiment, more sophisticated criteria may be used. For example, the radius could be different for different grid points, or a geographic shape other than a circle may be used to define the data sets used for each grid point. Alternately, there may be data from regions relatively far away from a particular grid point that may be considered useful for expected loss calculations for a particular grid point, and there may be data from locations relatively near the grid point that may be considered not useful. ; Column 3, Lines 30-40, Any known method of weighting data may be used for this method. One such method is to assign a weight which is a fraction having distance from the grid point in the denominator. Such a weight would decrease as distance from the point being rated increases. A general formula for such a weight is; Column 3, Lines 65-67 to Column 4, Lines 1-5, After weights W are determined for all individual data records, each W is divided by the sum of all W's to provide a relative weight. Thus, the relative weights W will sum to 1, and each relative weight W represents a percentage of the total of the weights W. This example assumes that there is exactly one exposure unit associated with each data point (e.g., one vehicle per policy).

Claim Rejections - 35 USC § 103

54. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

55. **Claims 1, 3-5, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,186,793 B1 to Brubaker (hereinafter Brubaker) in view of U.S. Patent No. 6,604,080 B1 to Kern (hereinafter Kern).**

56. **As per Claim 1**, Brubaker discloses an insurance packaging method, comprising:

calculating a geographic insurance rating (Column 1, Lines 39-42, It is, therefore, an object of the invention to provide a more accurate method of evaluating expected losses at given geographic locations for the purpose of establishing insurance rates for those locations.; Column 2, Lines 20-25, The first task in the method of the present invention is to select a grid of predetermined points, within a geographic area, at which expected loss information and insurance rates will be calculated.);

Brubaker does not expressly disclose calculating, a dollar limit of coverage for each of a plurality of risks in lieu of one or more exclusions; and packaging a single comprehensive insurance policy that includes coverage for each of the plurality of risks up to the risk's corresponding dollar limit of coverage.

However, Kern teaches packaging a policy that provides comprehensive insurance for multiple risks subject to a dollar limit of coverage (Column 18, Lines 63-67 to Column 19, Lines 1-5, Another aspect from a property and casualty agent's

perspective is that an agent typically sells workers' compensation insurance and employers other liability coverage (e.g., commercial automobile general liability, etc.). Often times the employer must have an "umbrella" (comprehensive) policy to cover against catastrophic losses. An umbrella policy generally requires high limits with quality A. M. Best-Rated carriers. The financial innovation underlying the present invention accomplishes all these needs.; Column 12, Lines 5-7, have minimum limits for bodily injury by accidents or disease, with a $500,000-policy limit).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the invention of Brubaker with the teachings of Kern to include calculating, a dollar limit of coverage for each of a plurality of risks in lieu of one or more exclusions; and packaging a single comprehensive insurance policy that includes coverage for each of the plurality of risks up to the risk's corresponding dollar limit of coverage.

A person having ordinary skill in the art at the time the invention was made would have been motivated to do so in order to reduce the complexity and shore up gaps in coverage for a broad spectrum of risks for the insured as taught by Kern (Column 18, Lines 56-57, Property and casualty agents first must feel comfortable that there are gaps in coverage in order to market this plan.; Column 19, Lines 15-16, Yet another advantage of the underlying financial product of the present invention is that it is a fully insured plan).

57. **As per Claim 3**, Brubaker discloses the method of Claim 1, wherein calculating a geographic insurance rating includes:

identifying a location (Column 1, Lines 48-55, These objects and others are achieved according to the present invention by an insurance rating process comprising the steps of selecting a plurality of predetermined geographic locations or points, determining the expected losses at the predetermined points, calculating an insurance rate for each of the predetermined points, and then interpolating among the insurance rate values established for the predetermined points to determine a rate at the desired location.);

identifying a geographic risk zone (Column 1, Lines 48-55, These objects and others are achieved according to the present invention by an insurance rating process comprising the steps of selecting a plurality of predetermined geographic locations or points, determining the expected losses at the predetermined points, calculating an insurance rate for each of the predetermined points, and then interpolating among the insurance rate values established for the predetermined points to determine a rate at the desired location.);

comparing the location to the geographic risk zone to determine **if** the location is at least partially within the risk zone (Column 2, Lines 25-28, after the rates at grid points have been calculated, the rate for any desired location between the grid points may be calculated by interpolation among the values at surrounding grid points; Column 2, Lines 43-48, Selection of data for calculation of expected losses for each grid point should be based on criteria that indicate expected losses per unit of exposure, such as geographic proximity.); and

calculating an insurance rating according to the comparison (Column 1, Lines 39-42, It is, therefore, an object of the invention to provide a more accurate method of evaluating expected losses at given geographic locations for the purpose of establishing insurance rates for those locations.; Column 2, Lines 20-25, The first task in the method of the present invention is to select a grid of predetermined points, within a geographic area, at which expected loss information and insurance rates will be calculated; Column 2, Lines 43-48, Selection of data for calculation of expected lossed for each grid point should be based on criteria that indicate expected losses per unit of exposure, such as geographic proximity.; Column 5, Lines 42-45, $R_{(x,y)}$ represents the rate to be calculated for the point (x,y), and it is assumed that rates for the four grid points have been determined based on loss and exposure data according to the process described herein.).

58. **As per Claim 4**, Brubaker does not expressly disclose the method of Claim 1, wherein packaging includes packaging a single comprehensive insurance policy that includes:

coverage for each of the plurality of risks up to the risk's corresponding dollar limit of coverage, and

coverage for a legal defense for each risk up to the dollar limit of coverage for that risk.

However, Kern teaches packaging a policy that provides comprehensive insurance for multiple risks subject to a dollar limit of coverage (Column 18, Lines 63-67 to Column 19, Lines 1-5, Another aspect from a property and casualty agent's

perspective is that an agent typically sells workers' compensation insurance and employers other liability coverage (e.g., commercial automobile general liability, etc.). Often times the employer must have an "umbrella" (comprehensive) policy to cover against catastrophic losses. An umbrella policy generally requires high limits with quality A. M. Best-Rated carriers. The financial innovation underlying the present invention accomplishes all these needs.; Column 12, Lines 5-7, have minimum limits for bodily injury by accidents or disease, with a $500,000-policy limit).

and coverage for a legal defense (Column , Lines Employers liability insurance is an essential and indispensable protection required by employers. It covers the cost of legal defense and provides coverage against intentional injury claims, dual capacity claims, and third party over claims.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the invention of Brubaker with the teachings of Kern to include coverage for each of the plurality of risks up to the risk's corresponding dollar limit of coverage and coverage for a legal defense for each risk up to the dollar limit of coverage for that risk.

A person having ordinary skill in the art at the time the invention was made would have been motivated to do so in order to reduce the complexity and shore up gaps in coverage for a broad spectrum of risks for the insured as taught by Kern (Column 18, Lines 56-57, Property and casualty agents first must feel comfortable that there are gaps in coverage in order to market this plan.; Column 19, Lines 15-16, Yet another

advantage of the underlying financial product of the present invention is that it is a fully insured plan).

59. **As per Claim 5**, Brubaker discloses an insurance rating and packaging method, comprising:

identifying a location (Column 1, Lines 48-55, These objects and others are achieved according to the present invention by an insurance rating process comprising the steps of selecting a plurality of predetermined geographic locations or points, determining the expected losses at the predetermined points, calculating an insurance rate for each of the predetermined points, and then interpolating among the insurance rate values established for the predetermined points to determine a rate at the desired location.);

identifying a geographic risk zone (Column 1, Lines 48-55, These objects and others are achieved according to the present invention by an insurance rating process comprising the steps of selecting a plurality of predetermined geographic locations or points, determining the expected losses at the predetermined points, calculating an insurance rate for each of the predetermined points, and then interpolating among the insurance rate values established for the predetermined points to determine a rate at the desired location.);

comparing the location to the geographic risk zone to determine **if** the location is at least partially within the risk zone (Column 2, Lines 25-28, after the rates at grid points have been calculated, the rate for any desired location between the grid points may be calculated by interpolation among the values at surrounding grid points; Column

2, Lines 43-48, Selection of data for calculation of expected losses for each grid point should be based on criteria that indicate expected losses per unit of exposure, such as geographic proximity.); and

calculating an insurance rating according to the comparison (Column 1, Lines 39-42, It is, therefore, an object of the invention to provide a more accurate method of evaluating expected losses at given geographic locations for the purpose of establishing insurance rates for those locations.; Column 2, Lines 20-25, The first task in the method of the present invention is to select a grid of predetermined points, within a geographic area, at which expected loss information and insurance rates will be calculated; Column 2, Lines 43-48, Selection of data for calculation of expected lossed for each grid point should be based on criteria that indicate expected losses per unit of exposure, such as geographic proximity.; Column 5, Lines 42-45, $R_{(x,y)}$ represents the rate to be calculated for the point (x,y), and it is assumed that rates for the four grid points have been determined based on loss and exposure data according to the process described herein.).

Brubaker does not expressly disclose calculating, a dollar limit of coverage for each of a plurality of risks in lieu of one or more exclusions; and packaging a single comprehensive insurance policy that includes coverage for each of the plurality of risks up to the risk's corresponding dollar limit of coverage.

However, Kern teaches packaging a policy that provides comprehensive insurance for multiple risks subject to a dollar limit of coverage (Column 18, Lines 63-67 to Column 19, Lines 1-5, Another aspect from a property and casualty agent's

perspective is that an agent typically sells workers' compensation insurance and employers other liability coverage (e.g., commercial automobile general liability, etc.). Often times the employer must have an "umbrella" (comprehensive) policy to cover against catastrophic losses. An umbrella policy generally requires high limits with quality A. M. Best-Rated carriers. The financial innovation underlying the present invention accomplishes all these needs.; Column 12, Lines 5-7, have minimum limits for bodily injury by accidents or disease, with a $500,000-policy limit).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the invention of Brubaker with the teachings of Kern to include calculating, a dollar limit of coverage for each of a plurality of risks in lieu of one or more exclusions; and packaging a single comprehensive insurance policy that includes coverage for each of the plurality of risks up to the risk's corresponding dollar limit of coverage.

A person having ordinary skill in the art at the time the invention was made would have been motivated to do so in order to reduce the complexity and shore up gaps in coverage for a broad spectrum of risks for the insured as taught by Kern (Column 18, Lines 56-57, Property and casualty agents first must feel comfortable that there are gaps in coverage in order to market this plan.; Column 19, Lines 15-16, Yet another advantage of the underlying financial product of the present invention is that it is a fully insured plan).

60. **As per Claim 7**, Brubaker does not expressly disclose the method of Claim 5, wherein packaging includes packaging a single comprehensive insurance policy that includes:

coverage for each of the plurality of risks up to the risk's corresponding dollar limit of coverage; and

coverage for a legal defense for each risk up to the dollar limit of coverage for that risk.

However, Kern teaches packaging a policy that provides comprehensive insurance for multiple risks subject to a dollar limit of coverage (Column 18, Lines 63-67 to Column 19, Lines 1-5, Another aspect from a property and casualty agent's perspective is that an agent typically sells workers' compensation insurance and employers other liability coverage (e.g., commercial automobile general liability, etc.). Often times the employer must have an "umbrella" (comprehensive) policy to cover against catastrophic losses. An umbrella policy generally requires high limits with quality A. M. Best-Rated carriers. The financial innovation underlying the present invention accomplishes all these needs.; Column 12, Lines 5-7, have minimum limits for bodily injury by accidents or disease, with a $500,000-policy limit).

and coverage for a legal defense (Column , Lines Employers liability insurance is an essential and indispensable protection required by employers. It covers the cost of legal defense and provides coverage against intentional injury claims, dual capacity claims, and third party over claims.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the invention of Brubaker with the teachings of Kern to include coverage for each of the plurality of risks up to the risk's corresponding dollar limit of coverage and coverage for a legal defense for each risk up to the dollar limit of coverage for that risk.

A person having ordinary skill in the art at the time the invention was made would have been motivated to do so in order to reduce the complexity and shore up gaps in coverage for a broad spectrum of risks for the insured as taught by Kern (Column 18, Lines 56-57, Property and casualty agents first must feel comfortable that there are gaps in coverage in order to market this plan.; Column 19, Lines 15-16, Yet another advantage of the underlying financial product of the present invention is that it is a fully insured plan).

61. **Claim 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brubaker in view of Kern and in further view of U.S. Patent No. 5,324,077 to Kessler (hereinafter Kessler).**

62. **As per Claim 2**, neither Brubaker nor Kessler expressly disclose the method of Claim 1, wherein calculating a dollar limit of coverage includes calculating, a dollar limit of coverage for each of a plurality of risks in lieu of one or more exclusions, the calculations being based at least in part on the geographic insurance rating.

However, Kessler teaches insurance that includes a dollar limit of coverage adjusted for difference geographic areas (Column 4, Lines 19-22, For each patient who is covered by an insurance policy, the medical care provider is authorized to

immediately issue to itself a medical data draft in an amount up to a set limit towards the cost of the patient's visit; Column 13, Lines 15-23, for the protection of the insurers, the medical data drafts, which the medical care providers are authorized to issue to themselves, have a set dollar limit per draft. The dollar limit may be set to substantially reimburse, at the time the draft is written, the medical care provider for most of the cost of the service just rendered. In this regard, the limit can be adjusted for different geographic areas and for different types of medical care providers to reflect differences in costs).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the invention of Brubaker in view of Kern with the teachings of Kessler so that calculating a dollar limit of coverage includes calculating, a dollar limit of coverage for each of a plurality of risks in lieu of one or more exclusions, the calculations being based at least in part on the geographic insurance rating.

A person having ordinary skill in the art at the time the invention was made would have been motivated to do so in order to provide protection to the insurer as taught by Kessler (Column 13, Lines 15-23). (Column 1, Lines 39-42, It is, therefore, an object of the invention to provide a more accurate method of evaluating expected losses at given geographic locations for the purpose of establishing insurance rates for those locations.; Column 2, Lines 20-25, The first task in the method of the present invention is to select a grid of predetermined points, within a geographic area, at which expected loss information and insurance rates will be calculated.).

63. **As per Claim 6**, Brubaker does not expressly disclose the method of Claim 5, wherein calculating a dollar limit of coverage includes calculating a dollar limit of coverage for each of a plurality of risks in lieu of one or more exclusions.

However, Kern teaches packaging a policy that provides comprehensive insurance for multiple risks subject to a dollar limit of coverage (Column 18, Lines 63-67 to Column 19, Lines 1-5, Another aspect from a property and casualty agent's perspective is that an agent typically sells workers' compensation insurance and employers other liability coverage (e.g., commercial automobile general liability, etc.). Often times the employer must have an "umbrella" (comprehensive) policy to cover against catastrophic losses. An umbrella policy generally requires high limits with quality A. M. Best-Rated carriers. The financial innovation underlying the present invention accomplishes all these needs.; Column 12, Lines 5-7, have minimum limits for bodily injury by accidents or disease, with a $500,000-policy limit).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the invention of Brubaker with the teachings of Kern to include calculating, a dollar limit of coverage for each of a plurality of risks in lieu of one or more exclusions.

A person having ordinary skill in the art at the time the invention was made would have been motivated to do so in order to reduce the complexity and shore up gaps in coverage for a broad spectrum of risks for the insured as taught by Kern (Column 18, Lines 56-57, Property and casualty agents first must feel comfortable that there are gaps in coverage in order to market this plan.; Column 19, Lines 15-16, Yet another

advantage of the underlying financial product of the present invention is that it is a fully insured plan).

Neither Brubaker nor Kern disclose the calculations being based at least in part on the insurance rating.

However, Kessler teaches insurance that includes a dollar limit of coverage adjusted for difference geographic areas (Column 4, Lines 19-22, For each patient who is covered by an insurance policy, the medical care provider is authorized to immediately issue to itself a medical data draft in an amount up to a set limit towards the cost of the patient's visit; Column 13, Lines 15-23, for the protection of the insurers, the medical data drafts, which the medical care providers are authorized to issue to themselves, have a set dollar limit per draft. The dollar limit may be set to substantially reimburse, at the time the draft is written, the medical care provider for most of the cost of the service just rendered. In this regard, the limit can be adjusted for different geographic areas and for different types of medical care providers to reflect differences in costs).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the invention of Brubaker in view of Kern with the teachings of Kessler so that calculating a dollar limit of coverage includes calculating, a dollar limit of coverage for each of a plurality of risks in lieu of one or more exclusions, the calculations being based at least in part on the geographic insurance rating.

A person having ordinary skill in the art at the time the invention was made would have been motivated to do so in order to provide protection to the insurer as taught by Kessler (Column 13, Lines 15-23).

64. **Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brubaker in view of U.S. Patent No. 5,897,619 to Hargrove Jr. et al. (hereinafter Hargrove).**

65. **As per Claim 32,** Brubaker discloses an insurance rating system, comprising:

an identified location to a geographic risk zone to determine if the identified location falls within the geographic risk zone (Column 2, Lines 25-28, after the rates at grid points have been calculated, the rate for any desired location between the grid points may be calculated by interpolation among the values at surrounding grid points.).; and

if the location is determined to fall within the geographic risk zone, to obtain and use a score associated with the risk zone to calculate an insurance rating related to the identified location (Column 2, Lines 25-28, after the rates at grid points have been calculated, the rate for any desired location between the grid points may be calculated by interpolation among the values at surrounding grid points.; Column 3, Lines 30-40, Any known method of weighting data may be used for this method. One such method is to assign a weight which is a fraction having distance from the grid point in the denominator. Such a weight would decrease as distance from the point being rated increases. A general formula for such a weight is $w(1/D+1)^p$; Column 3, Lines 65-67 to Column 4, Lines 1-5, After weights W are determined for all individual data records,

each W is divided by the sum of all W's to provide a relative weight. Thus, the relative weights W will sum to 1, and each relative weight W represents a percentage of the total of the weights W. This example assumes that there is exactly one exposure unit associated with each data point (e.g., one vehicle per policy).

Brubaker does not expressly disclose a mapping module operable to compare or a risk rating module.

However, Hargrove teaches a mapping module operable to compare (Column 3, Lines 29-31, The system has an interface screen which allows the user to draw and add field boundaries on maps representative of the pertinent region) and a risk rating module (Column The application software, which includes MapInfo, is customized using MapBasic and Microsoft VisualBasic., Also, because each field is positioned in its correct geographic region, this system 10 functions to determine rates on a field by field basis. The system 10 verifies (1) that acreage and/or production information has been entered for each field associated with a particular policy; (2) that the underwriting standards of the Federal Crop Insurance Corporation ("FCIC") have been met such as ensuring that multiple units have not been created for fields of the same crop contained in the same section; and (3) that the specified crop, practice, and type combination is insurable in a given region of the United States. Furthermore, this farm management system 10 provides the insurer with a tools to verify claims, thereby reducing fraud.).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the invention of Brubaker with the teachings of Hargrove to include a mapping module and a risk rating module.

A person having ordinary skill in the art at the time the invention was made would have been motivated to do so in order to automate the insurance rating process.

66. **As per Claim 33**, Brubaker does not expressly disclose the system of Claim 32, further comprising an interface module operable to provide an interface having user accessible controls for use in identifying the location.

However, Hargrove teaches an interface module operable to provide an interface having user accessible controls for use in identifying a location. (see Figure 5; Column 3, Lines 15-the present invention provides an interactive farm management system designed to acquire, portray, and process field related data. This system will further be used to set rates on a field by field basis...This data is used in conjunction with interface screens through which the user can input field related information to perform the various tasks set forth above; Column 6, Lines 15-21, The interface screens allow the user to access information regarding a particular field. All the information regarding the fields insured by the insurance company are stored in these databases.; Column 4, Lines 66-67, FIG. 2A illustrates a sample record 270 in the field identification database 30)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the invention of Brubaker with the teachings of Hargrove to include an interface module operable to provide an interface having user accessible controls for use in identifying the location.

A person having ordinary skill in the art at the time the invention was made would have been motivated to do so in order to allow the user to easily and accurately draw the location and its boundaries as taught by Hargrove (Column 5, Lines 33-36, The

image database 31 links individual fields to various images which can be added to the map or superimposed on the map to allow the user to easily and accurately draw field boundaries in their proper location on the map.; Column , Lines The map database 28 contains a map of the United States which shows the states, counties, townships/ranges, sections, waterways, streets, and railroad boundaries. This map database 28 provides the agent and farmer the capability to (1) view all the fields covered by an insurance policy; and (2) add fields to a policy by drawing the field directly on the map without knowing the exact legal description.).

67. **As per Claim 34**, Brubaker does not expressly disclose the system of claim 32, further comprising a risk zone database containing data identifying the geographic risk zone and the score associated with the risk zone.

However, Hargrove teaches a risk zone database containing data identifying the geographic risk zone and the score associated with the risk zone (see Figures 2A-E, Column 4, Lines 10-11, a field identification ("Field ID") database 30; Column 3, Lines 34-35, The system then processes this information using data from the databases to provide a rate for each field.; Column 5, Lines 58-61, Furthermore, there is a practice number 216 and a type number 220 which is used in rating the policy and in validating against the records in the practice and type databases 25, 27.).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the invention of Brubaker with the teachings of Hargrove to include a risk zone database containing data identifying the geographic risk zone and the score associated with the risk zone

A person having ordinary skill in the art at the time the invention was made would have been motivated to do so in order to verify the insurability of the risk zone as taught by Hargrove (Column 6, Lines 59-62, The system 10 will verify the insurability of each crop and the insurability of each crop, practice, and type combination).

68. **As per Claim 35,** Brubaker discloses the system of Claim 32, wherein the comparing a boundary of the identified location to a boundary of the geographic risk zone to determine if at least a portion of a geographic area bounded by the location boundary is also bounded by the geographic risk zone boundary (Column 2, Lines 41-59, geo-coded" loss and exposure data, that is, data that identifies the latitude and longitude associated with prior insured exposures and losses, are utilized. Selection of data for calculation of expected losses for each grid point should be based on criteria that indicate expected similarity to the grid point in terms of expected losses per unit of exposure, such as geographic proximity. For example, the rate for grid point 10 may be calculated using all loss and exposure data within a one and one-half mile radius for grid point 10. In a preferred embodiment, more sophisticated criteria may be used. For example, the radius could be different for different grid points, or a geographic shape other than a circle may be used to define the data sets used for each grid point. Alternately, there may be data from regions relatively far away from a particular grid point that may be considered useful for expected loss calculations for a particular grid point, and there may be data from locations relatively near the grid point that may be considered not useful.).

Brubaker does not expressly disclose a mapping module operable to compare or a risk rating module.

However, Hargrove teaches a mapping module operable to compare (Column 3, Lines 29-31, The system has an interface screen which allows the user to draw and add field boundaries on maps representative of the pertinent region).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the invention of Brubaker with the teachings of Hargrove to include a mapping module.

A person having ordinary skill in the art at the time the invention was made would have been motivated to do so in order to automate the insurance rating process.

69. **As per Claim 36**, Brubaker discloses the system of Claim 32, comparing a boundary of the identified location to a boundary of the geographic risk zone to determine if the location boundary intersects or is contained within the geographic risk zone boundary (Column 2, Lines 41-59, geo-coded" loss and exposure data, that is, data that identifies the latitude and longitude associated with prior insured exposures and losses, are utilized. Selection of data for calculation of expected losses for each grid point should be based on criteria that indicate expected similarity to the grid point in terms of expected losses per unit of exposure, such as geographic proximity. For example, the rate for grid point 10 may be calculated using all loss and exposure data within a one and one-half mile radius for grid point 10. In a preferred embodiment, more sophisticated criteria may be used. For example, the radius could be different for different grid points, or a geographic shape other than a circle may be used to define

the data sets used for each grid point. Alternately, there may be data from regions relatively far away from a particular grid point that may be considered useful for expected loss calculations for a particular grid point, and there may be data from locations relatively near the grid point that may be considered not useful.).

Brubaker does not expressly disclose a mapping module operable to compare or a risk rating module.

However, Hargrove teaches a mapping module operable to compare (Column 3, Lines 29-31, The system has an interface screen which allows the user to draw and add field boundaries on maps representative of the pertinent region).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the invention of Brubaker with the teachings of Hargrove to include a mapping module.

A person having ordinary skill in the art at the time the invention was made would have been motivated to do so in order to automate the insurance rating process.

70. **As per Claim 37**, Brubaker discloses the system of Claim 32, comparing a geographic point that defines the identified location to a boundary of the geographic risk zone to determine if the geographic point is contained within the geographic risk zone boundary (Column 2, Lines 41-59, geo-coded" loss and exposure data, that is, data that identifies the latitude and longitude associated with prior insured exposures and losses, are utilized. Selection of data for calculation of expected losses for each grid point should be based on criteria that indicate expected similarity to the grid point in terms of expected losses per unit of exposure, such as geographic proximity. For example, the

rate for grid point 10 may be calculated using all loss and exposure data within a one and one-half mile radius for grid point 10. In a preferred embodiment, more sophisticated criteria may be used. For example, the radius could be different for different grid points, or a geographic shape other than a circle may be used to define the data sets used for each grid point. Alternately, there may be data from regions relatively far away from a particular grid point that may be considered useful for expected loss calculations for a particular grid point, and there may be data from locations relatively near the grid point that may be considered not useful.).

Brubaker does not expressly disclose a mapping module operable to compare.\

However, Hargrove teaches a mapping module operable to compare (Column 3, Lines 29-31, The system has an interface screen which allows the user to draw and add field boundaries on maps representative of the pertinent region).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the invention of Brubaker with the teachings of Hargrove to include a mapping module.

A person having ordinary skill in the art at the time the invention was made would have been motivated to do so in order to automate the insurance rating process.

71. **As per Claim 38**, Brubaker discloses the system of Claim 32, wherein:

the mapping module is operable to compare the identified location to each of a plurality of geographic risk zones to determine if the identified location falls within any of the geographic risk zones (Column 2, Lines 25-28, after the rates at grid points have

been calculated, the rate for any desired location between the grid points may be calculated by interpolation among the values at surrounding grid points.).;

a risk rating module operable, for each geographic risk zone that the identified location falls within, to obtain and use a score associated with that risk zone to calculate an insurance rating related to the identified location.

72. **As per Claim 39**, Brubaker discloses an insurance rating system, comprising:

Brubaker does not expressly disclose an interface module operable to provide an interface having user accessible controls for use in identifying a location.

to compare an identified location to each of a plurality of geographic risk zones to determine **if** the identified location falls within any of the geographic risk zones (Column 2, Lines 25-28, after the rates at grid points have been calculated, the rate for any desired location between the grid points may be calculated by interpolation among the values at surrounding grid points.; Column 2, Lines 25-28, after the rates at grid points have been calculated, the rate for any desired location between the grid points may be calculated by interpolation among the values at surrounding grid points.; Column 3, Lines 30-40, Any known method of weighting data may be used for this method. One such method is to assign a weight which is a fraction having distance from the grid point in the denominator. Such a weight would decrease as distance from the point being rated increases. A general formula for such a weight is $w(1/D+1)^p$; Column 3, Lines 65-67 to Column 4, Lines 1-5, After weights W are determined for all individual data records, each W is divided by the sum of all W's to provide a relative weight. Thus, the relative weights W will sum to 1, and each relative weight W represents a percentage of

the total of the weights W. This example assumes that there is exactly one exposure unit associated with each data point (e.g., one vehicle per policy).;

for each geographic risk zone that the identified location falls within, to obtain and use a score associated with that risk zone to calculate an insurance rating related to the identified location location (Column 2, Lines 25-28, after the rates at grid points have been calculated, the rate for any desired location between the grid points may be calculated by interpolation among the values at surrounding grid points.; Column 3, Lines 30-40, Any known method of weighting data may be used for this method. One such method is to assign a weight which is a fraction having distance from the grid point in the denominator. Such a weight would decrease as distance from the point being rated increases. A general formula for such a weight is $w(1/D+1)^p$; Column 3, Lines 65-67 to Column 4, Lines 1-5, After weights W are determined for all individual data records, each W is divided by the sum of all W's to provide a relative weight. Thus, the relative weights W will sum to 1, and each relative weight W represents a percentage of the total of the weights W. This example assumes that there is exactly one exposure unit associated with each data point (e.g., one vehicle per policy)..

Brubaker does not expressly disclose an interface module operable to provide an interface having user accessible controls for use in identifying a location.

However, Hargrove teaches an interface module operable to provide an interface having user accessible controls for use in identifying a location (see Figure 5; Column 3, Lines 15-the present invention provides an interactive farm management system designed to acquire, portray, and process field related data. This system will further be

used to set rates on a field by field basis...This data is used in conjunction with interface screens through which the user can input field related information to perform the various tasks set forth above; Column 6, Lines 15-21, The interface screens allow the user to access information regarding a particular field. All the information regarding the fields insured by the insurance company are stored in these databases.; Column 4, Lines 66-67, FIG. 2A illustrates a sample record 270 in the field identification database 30)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the invention of Brubaker with the teachings of Hargrove to include an interface module operable to provide an interface having user accessible controls for use in identifying the location.

A person having ordinary skill in the art at the time the invention was made would have been motivated to do so in order to allow the user to easily and accurately draw the location and its boundaries as taught by Hargrove (Column 5, Lines 33-36, The image database 31 links individual fields to various images which can be added to the map or superimposed on the map to allow the user to easily and accurately draw field boundaries in their proper location on the map.; Column , Lines The map database 28 contains a map of the United States which shows the states, counties, townships/ranges, sections, waterways, streets, and railroad boundaries. This map database 28 provides the agent and farmer the capability to (1) view all the fields covered by an insurance policy; and (2) add fields to a policy by drawing the field directly on the map without knowing the exact legal description.).

Brubaker does not expressly disclose a mapping module operable to compare or a risk rating module.

However, Hargrove teaches a mapping module operable to compare (Column 3, Lines 29-31, The system has an interface screen which allows the user to draw and add field boundaries on maps representative of the pertinent region) and a risk rating module (Column The application software, which includes MapInfo, is customized using MapBasic and Microsoft VisualBasic., Also, because each field is positioned in its correct geographic region, this system 10 functions to determine rates on a field by field basis. The system 10 verifies (1) that acreage and/or production information has been entered for each field associated with a particular policy; (2) that the underwriting standards of the Federal Crop Insurance Corporation ("FCIC") have been met such as ensuring that multiple units have not been created for fields of the same crop contained in the same section; and (3) that the specified crop, practice, and type combination is insurable in a given region of the United States. Furthermore, this farm management system 10 provides the insurer with a tools to verify claims, thereby reducing fraud.).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the invention of Brubaker with the teachings of Hargrove to include a mapping module and a risk rating module.

A person having ordinary skill in the art at the time the invention was made would have been motivated to do so in order to automate the insurance rating process.

Conclusion

Additionally, the following prior art made of record and not relied upon are considered pertinent to applicant's disclosure.

a. U.S. Patent Application Publication No. 2004/0039609 A1 to Burkitt directed to a method and system to calculate insurance premiums based on geographic locations and/or zones;

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kellie Campbell whose telephone number is (571) 270-5495. The examiner can normally be reached on Monday through Thursday, 6:30 am to 5 pm est. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Kalinowski can be reached on 571-572-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

K.C.

/Alexander Kalinowski/

Supervisory Patent Examiner, Art Unit 3691